

CLAIMS

[1] An electronic device for executing an application in cooperation with at least one other electronic device connected to a network and realizing a predetermined device cooperation service, the electronic device comprising:

a storage section for storing device information, concerning all other electronic devices connected to the network, which includes at least information used for identifying a device and information of executable device cooperation services;

an identification section for identifying the other electronic device which is operable to work in cooperation, based on the device information;

a service information acquisition section for acquiring, from a predetermined server connected to the network, service information relating to device cooperation service executable in cooperation with the other electronic device having been identified;

an application acquisition section for specifying, based on the service information, the device cooperation service to be executed, and acquiring, from a predetermined server connected to the network, an application necessary for executing the device cooperation service having been specified;

an acquisition requesting section for requesting the other electronic device having been identified to acquire, from

the predetermined server, the service information relating to the device cooperation service having been specified; and

a start requesting section for requesting the other electronic device having been identified to start the device
5 cooperation service.

[2] The electronic device according to claim 1, wherein the information used for identifying the device is device type data indicating a device type of an electronic device and the information 10 of the executable device cooperation services is service type data indicating device cooperation services executable by the electronic devices.

[3] The electronic device according to claim 1, wherein the 15 service information is information having device type data associated with storage position data of an application necessary for executing the device cooperation service, the device type data being data indicating a device type of the electronic device which is operable to execute the device cooperation service.

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[4] The electronic device according to claim 3, wherein the application acquisition section acquires the application necessary for the device cooperation service with reference to the storage position data.

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[5] The electronic device according to claim 2, wherein the service information acquisition section requests the predetermined server to retrieve, based on the device type data of the device information, the device cooperation service executable in cooperation with the electronic device provided therewith, thereby acquiring the service information as a retrieval result from the predetermined server.

[6] The electronic device according to claim 5, wherein the identification section associates, for management, the service information acquired by the service information acquisition section with the device information of the other electronic device corresponding to the device type data having been specified by the service information acquisition section for retrieving the device cooperation service, thereby identifying the other electronic device which executes the device cooperation service.

[7] The electronic device according to claim 1, wherein the start requesting section further requests the other electronic device having been identified to acquire, from the predetermined server, a service application necessary for executing the device cooperation service and execute the service application.

[8] An electronic device for executing an application in cooperation with at least one other electronic device connected

to a network and realizing a predetermined device cooperation service, the electronic device comprising:

a service information acquisition section for acquiring, from a predetermined server connected to the network, service information relating to the device cooperation service to be executed in cooperation with the other electronic device, in response to a request from the other electronic device;

an application acquisition section for acquiring, from a predetermined server connected to the network, an application necessary for executing the device cooperation service indicated in the service information; and

an execution section for executing the acquired application.

15 [9] The electronic device according to claim 8, further comprising:

a storage section for storing device information, concerning all other electronic devices connected to the network, which includes at least information used for identifying a device 20 and information of executable device cooperation services; and

a distribution section for distributing the device information to the other electronic device as necessary.

25 [10] The electronic device according to claim 8, wherein the information used for identifying the device is device type data

indicating a device type of an electronic device and the information of the executable device cooperation services is service type data indicating device cooperation services executable by the electronic devices.

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[11] The electronic device according to claim 8, wherein the service information is information having the device type data associated with storage position data of an application necessary for executing the device cooperation service, the device type data being data indicating a device type of the electronic device which is operable to execute the device cooperation service.

[12] The electronic device according to claim 11, wherein the application acquisition section acquires the application necessary for the device cooperation service with reference to the storage position data.

[13] The electronic device according to claim 8, wherein the execution section makes a start in response to an execution request from the other electronic device.

[14] A device cooperation service system for executing an application in cooperation with a plurality of electronic devices connected to a network and realizing a predetermined device cooperation service, the device cooperation service system

comprising;

at least one control electronic device for controlling
the device cooperation service;

at least one execution electronic device for executing
5 the device cooperation service in cooperation with the at least
one control electronic device;

a first server, connected to the network, for storing
service information relating to the device cooperation service;

and

10 a second server, connected to the network, for storing
applications necessary for executing the device cooperation
service, wherein

the control electronic device includes:

a storage section for storing device information,
15 concerning all other electronic devices connected to the network,
which includes at least information used for identifying a device
and information of executable device cooperation services;

an identification section for identifying the
execution electronic device which is operable to work in
20 cooperation, based on the device information;

a service information acquisition section for
acquiring, from the first server, service information relating
to device cooperation service executable in cooperation with the
execution electronic device;

25 an application acquisition section for specifying,

based on the service information, the device cooperation service to be executed, and acquiring, from the second server, an application necessary for executing the device cooperation service having been specified;

5 an acquisition requesting section for requesting the execution electronic device to acquire, from the first server, the service information relating to the device cooperation service having been specified; and

· a start requesting section for requesting the
10 execution electronic device to start the device cooperation service,
and

the execution electronic device includes:

 a service information acquisition section for acquiring, from the first server, service information relating
15 to the device cooperation service to be executed in cooperation with the control electronic device, in response to the request from the control electronic device;

 an application acquisition section for acquiring, for the second server, the application necessary for executing
20 the device cooperation service indicated in the service information,
and

 an execution section for executing the acquired application.

14, further comprising a proxy device for relaying data to be exchanged between an in-home electronic device connected to an in-home network and an out-of-home electronic device connected to an out-of-home network.

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[16] The device cooperation service system according to claim 15, wherein the proxy device acquires, from the out-of-home electronic device, device attribute information including the device information and distributes the acquired attribute 10 information to the in-home electronic device.

[17] The device cooperation service system according to claim 16, wherein the proxy device distributes the attribute information to the in-home electronic device using, as a trigger, the acquisition of the attribute information from the out-of-home 15 electronic device.

[18] The device cooperation service system according to claim 16, wherein the proxy device distributes the attribute information 20 to the in-home electronic device using, as a trigger, a request of the attribute information received from the in-home electronic device.

[19] The device cooperation service system according to claim 25 15, wherein the proxy device acquires device attribute information

including the device information from the in-home electronic device and distributes the acquired attribute information to the out-of-home electronic device.

5 [20] The device cooperation service system according to claim 19, wherein the proxy device distributes the attribute information to the out-of-home electronic device using, as a trigger, the acquisition of the attribute information from the in-home electronic device.

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[21] The device cooperation service system according to claim 19, wherein the proxy device distributes the attribute information to the out-of-home electronic device using, as a trigger, a request of the attribute information received from the out-of-home electronic device.

15 [22] The device cooperation service system according to claim 15, wherein

the information used for identifying the device is device type data indicating a device type of an electronic device, and the proxy device requests the first server to retrieve, based on the device type data of the device information of the in-home electronic device and the out-of-home electronic device, the device cooperation service executable in combination of the electronic devices, thereby acquiring the service information as

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a retrieval result from the first server.

[23] The device cooperation service system according to claim 15, wherein

5 the information used for identifying the device is device type data indicating a device type of the electronic device, and
· the proxy device associates, for management, the
· acquired service information with the device information of the
· electronic device corresponding to the device type data having
10 been specified for retrieving the device cooperation service,
 thereby identifying the electronic device which executes the device
 cooperation service.